

Newsletter Vol. VI, No. 7, May 2024

FROM THE SCIENTIFIC DIRECTOR

Dear members of the SMRC community,



We also recently hosted Dr. Rebecca Wyse from the University of Newcastle (NSW, Australia) on May 22nd. Dr. Wyse shed light on digital interventions that support cancer surgery patients through her lecture on the 'RecoverEsupport Program'. As the SMRC's Scientific Lecture Series continues to expand, we will continue to increase the number of speakers from outside McGill, Quebec and Canadian networks of research. Challenges in harnessing the potential of innovation towards better health are common to all, we have a lot to gain from experiences across the world. With this in mind, please don't hesitate to reach out with suggestions of topics and speakers that will push the research community at St. Mary's and across the CIUSSS beyond their comfort zone.

This issue of the newsletter highlights the great productivity of our researchers and particularly our students, who deserve special recognition. I encourage you to read about the accomplishments of Dr. Haifa Alotaibi, Nina Morena, Sydney Wasserman and Lydia Ould Brahim. It's exciting to see how the next generation of researchers and academics is flourishing at the SMRC.

I'd especially like to extend my congratulations to Dr. Talía Malagón for receiving the Chercheurs-boursiers et chercheuses-boursières (CB) Junior 1 award from FRQS. Her research in early cancer detection and addressing health inequalities in breast cancer diagnosis is invaluable and SMRC is proud to be a part of her growing success. Dr. Malagón's contributions exemplify the impactful work happening at SMRC, and I eagerly anticipate further achievements from her and our dedicated team of researchers.

I look forward to seeing you at our last few events of the academic year!

Ari N. Meguerditchian, MD Scientific Director

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SMRC research teams are embracing the forefront of innovation, using Artificial Intelligence (AI), Virtual Reality (VR) and advanced imaging technologies to support advancements in healthcare. These cuttingedge tools are transforming various aspects of medicine, from diagnostics to treatment strategies and care delivery. Here are some examples of how SMRC researchers are harnessing these technologies:

Exploring the Role of ChatGPT in Surgical Education: Evaluating the Quality of Generated Operative Steps and their Usability for Breast Oncoplastic Surgical Skill Acquisition

Dr. Haifa Alotaibi, a surgical fellow working with **Dr. Ari Meguerditchian**, is pioneering the integration of AI into surgical education and skill development. Having previously authored a book aimed at aiding surgical trainees in preparing for clinical board exams, Dr. Alotaibi is now exploring the potential of AI in enhancing surgeons' proficiency in treating breast cancer. Leveraging generative AI tools like ChatGPT, she aims to provide instructional support for oncoplastic breast surgery (OBS), thereby facilitating the learning process for surgeons unfamiliar with these advanced techniques. Her upcoming study seeks to validate ChatGPT-generated procedural steps for five specific OBS procedures and assess their usability as educational tools for practicing surgeons.

Randomized Trial of the Personalized Instrument in Total Shoulder Arthroplasty (PITSA study)

In orthopedic surgery, SMHC surgeons are utilizing innovative mixed reality imaging tools to operate with heightened precision and consistency. Total shoulder arthroplasty, a procedure known for improving function and alleviating shoulder pain, is benefiting from the implementation of groundbreaking blueprint technology. Patient-specific guides generated by Blueprint software are currently studied in a randomized controlled trial to determine their impact on surgical outcomes.

Advancing Healthcare
Through
Technological
Innovation

Adaptive Wellness Intervention for Cancer Patients and Their Caregivers

SMRC researcher **Dr. Sylvie Lambert** is using the power of new technologies to develop innovative, adaptive interventions. TEMPO, the comprehensive web-based intervention to enhance the well-being of both cancer patients and their caregivers, uses sophisticated programming to tailor online modules to the individual physical and psychosocial needs of its users. The research team developed an internal algorithm that adapts module content based on results of patient and caregiver needs assessments. This personalized approach ensures that patients and caregivers receive evidence-based strategies and resources tailored to their unique circumstances, ultimately fostering improved health management and quality of life.

Exploring a VR Music Intervention for Cognitive Enhancement in Elderly Care

VR tools are expanding the boundaries of traditional medical practices, offering immersive experiences that can aid in pain management, patient education, and therapeutic interventions. **Dr. Julia Chabot** and **Dr. Harmehr Sekhon** are leading a new study examining the use of a VR music intervention in a clinical setting to improve cognitive function amongst older adults. This open-label feasibility study assesses tolerability and acceptability factors in addition to the effects of musical VR on positive emotions, pain, and mental health in older adult inpatients. In February 2024, Dr. Chabot's team completed the filming for this CARE-funded project ("Virtual Reality based Music Intervention in an Acute Geriatric Setting"), and the behind the scenes are <u>available to watch on SMRC's website</u>. Dr. Sekhon will also be providing a special presentation relating to VR in healthcare on June 20.



Dr. Talía Malagón receives FRQS Chercheurs-boursiers et chercheusesboursières (CB) Junior 1 award

Congratulations to SMRC's Dr. Talía Malagón on receiving the Chercheurs-boursiers et chercheuses-boursières (CB) Junior 1 award from the Fonds de recherche du Québec – Santé (FRQS).

This competitive funding will support Dr. Malagón's work on her current project titled: *Health Decision Models and Data Matching for Cancer Prevention, Multiple Cancer Screening and Assessing the Resilience of Cancer Care.*



The Junior 1 award includes a starting grant of an annual \$20,000 for a four-year term, which will help support her research into early cancer detection to improve cancer survival, and on health inequalities in the stage at diagnosis of breast cancer. SMRC is incredibly proud of this important milestone for Dr. Talía Malagón as well as the recognition she has received for her work in epidemiology since joining the SMRC in 2023.

Dr. Anita Koushik and Dr. Sylvie Lambert are Co-Investigators on GACD Grant

SMRC researchers Dr. Anita Koushik and Dr. Sylvie Lambert are co-Investigators on a large team project titled *Leveraging the built environment to promote physical activity in primary care settings: implementation of a precision health strategy.* This five-year project is led by PI Tracie Barnett (McGill Family Medicine) and has received \$2M in funding through the <u>Global Alliance for Chronic Diseases (GACD)</u>.

The project investigates methods to increase physical activity amongst general populations, tested in both Tamale, Ghana and in Montreal, Canada. It aims to develop a plan to support family doctors and increase the chances that their patients not only take up exercise, but also stick with it consistently.







Dr. Nicolas Meti Co-Chairs the Montreal CUA GUMOC Community Medical Oncologists Regional Meeting

SMRC researcher Dr. Nicolas Meti co-chaired the Canadian Urology Association – Genito-Urinary Medical Oncologists of Canada (CUA GUMOC) Community Medical Oncologists Regional Meeting. Dr. Meti gave opening and closing remarks for the conference, as well as led a discussion on the current state of Genito-Urinary oncology in Quebec.



The CUA exists to promote the highest standard of urologic care for Canadians and to advance the art and science of urology. This event marked the 19th annual conference, and it took place on Friday, May 17, 2024 from 8am to 4pm.

SMRC's goals of improving the healthcare landscape of the future starts with actively supporting young researchers at the beginning of their careers in healthcare. We are incredibly proud of our hardworking students and fellows associated with SMRC, who continue to push the needle forward in patient-centred research. Our next few news items outline our most recent accomplishments from SMRC's students and fellows, whose work continues to be showcased and recognised nationally.

Nina Morena receives Young Researcher Award from QBCF

Congratulations to Nina Morena on being awarded the Young Researcher Award from the Quebec Breast Cancer Foundation (QBCF), for her exemplary contributions towards breast cancer prevention research.

This award was presented to Nina at the QBCF's Scientific Forum on May 4, 2024, and includes a \$5,000 bursary to support her research.





Nina also recently received the Travel Award for Students and New Professionals to attend the 2024 Canadian Centre for Applied Research in Cancer Control (ARCC) Conference in Ottawa where she will present the following abstracts:

- Content Quality of YouTube Videos About Metastatic Breast Cancer in Young Women: Systematic Assessment (oral presentation)
- The Use of Web-Based Patient Reviews to Assess Medical Oncologists' Competency: Mixed Methods Sequential Explanatory Study (poster presentation)
- How reliable are post-mastectomy breast reconstruction videos on YouTube? (poster presentation)





Dr. Haifa Alotaibi accepted for CSSO Annual Spring Meeting presentation

Congratulations to Dr. Haifa Alotaibi on having her abstract selected for presentation at the upcoming 2024 Canadian Society of Surgical Oncology (CSSO) Annual Spring Meeting. Her abstract is on *Reliability of YouTube content targeting Arabic-speaking patients with breast cancer regarding post-mastectomy reconstruction.*

Haifa gave a 4-minute oral presentation as part of the "Short Abstracts" category. The conference took place in Toronto, Ontario on May 2, 2024.





Sydney Wasserman accepted for CAPO 2024 presentation



Congratulations to Sydney Wasserman on having her abstract accepted in the upcoming Canadian Association of Psychosocial Oncology (CAPO) 2024 Conference. Her abstract explores the topic of *Enhancing Accessibility Through Equitable Implementation of Digital Health Interventions: A Concept Analysis of Digital Health Equity*.

Sydney will give a 20-minute oral presentation on her abstract, and will also have it published in the Current Oncology Journal after her conference presentation.

Lydia Ould Brahim wins SantéPop competition

Congratulations to Lydia Ould Brahim on being one of the winning recipients of the SantéPop 2023-2024 Scientific Publications competition. She received the award to support the publication of her paper *The Consolidated Intervention Adaptation Process (COINS): Lessons learned developing and undertaking an empirically and theoretically driven intervention adaptation [working title].* The manuscript is in preparation.



Roster of Oncology Clinical Trials



Bladder cancer

A Phase 3, randomized, study of neoadjuvant chemotherapy alone versus neoadjuvant, chemotherapy plus Nivolumab or Nivolumab and BMS-986205, followed by continued post- surgery therapy with Nivolumab and BMS-986205 in participants with muscle-invasive bladder cancer. [CA017-078]

Breast cancer

A Phase III Study of Trastuzumab Deruxtecan (T-DXd) with or without Pertuzumab vs Taxane, Trastuzumab and pertuzumab in HERs-Positive, first-line Metastatic Breast Cancer [Destiny]

Identification and evaluation of patients at risk of developing cardiotoxicity after receiving chemotherapy for breast cancer, leukemia or lymphoma [CarChem]

Registre cancer du sein métastatoque [Groupe McPeak-Sirois]

A Clinical Trial to Determine the Efficacy of Five Years of Letroxole Compared to Placebo in Patients Completing Five Years of Hormonal Therapy Consisting of an Aromatase Inhibitor (AI) or Tamoxifen Followed by an AI in Prolonging Disease-Free Survival in Postmenopausal Woman with Hormone Receptor Positive Breast Cancer [NSABP-42]

Lung cancer

A Phase III, Randomised, Open-Label Study of Savolitinib in Combination With Osimertinib Versus Platinum-Based Doublet Chemotherapy in Participants With EGFR Mutated MET-Overexpressed and/or Amplified, Locally Advanced or Metastatic Non-Small Cell Lung Cancer Who Have Progressed on Treatment With Osimertinib [SAFFRON]

An Open-label, Multicenter, Phase 3 Randomized, Active-Comparator-Controlled Clinical Study of Pembrolizumab (MK-3475) in Combination With Sacituzumab Govitecan Versus MK-3475 Monotherapy as First-line Treatment in Participants With PD L1 TPS Greater than or Equal to 50% Metastatic Non-small Cell Lung Cancer [KEYNOTE D46/EVOKE-03]

A phase 3 study of Pembrolizumab (MK-3475) in combination with concurrent chemoradiation therapy followed by Pembrolizumab with or without Olaparib vs concurrent chemoradiation therapy followed by Durvalumab in participants with unresectable, locally advanced, stage III non-small cell lung cancer (NSCLC). [MK 7339-012]

Roster of Oncology Clinical Trials



Lung cancer - continued

A randomized, double-blind, placebo-controlled phase 3 study of Pembrolizumab (MK-3475) in combination with concurrent chemoradiation therapy followed by Pembrolizumab with or without Olaparib (MK-7339), compared to concurrent chemoradiation therapy alone in participants with newly diagnosed treatment-naïve limited-stage small cell lung cancer (LS-SCLC). [MK 7339-013]

A Phase 2 Study to Evaluate the Efficacy and Safety of Pembrolizumab plus Investigational Agents in Combination with Etoposide and Cisplatin or Carboplatin for the first line Treatment of Participants with Extensive Stage Small Cell Lung Cancer [MK3475-B99]

A Phase 3, Multicenter, randomized, open-label trial to compare the efficacy and safety of pembrolizumab (MK-3475) in combination with Lenvatinib (E7080/MK-7902) versus docetaxel in previously treated participants with metastatic Non-small cell lung cancer (NSCLC) and progressive disease (PD) after platinum doublet chemotherapy and immunotherapy [MK7902-008]

A Phase 3 Randomized, Placebo-controlled Study to Evaluate the Safety and Efficacy of Pemetrexed + Platinum Chemotherapy + Pembrolizumab (MK-3475) with or without Lenvatinib (E7080/MK-7902) as First-line Intervention in Participants with Metastatic Non squamous Non-small Cell Lung Cancer [MK7902-006]

A Phase 3 Study of Pembrolizumab in Combination with Carboplatin/Taxane (Paclitaxel or Nab-paclitaxel) Followed by Pembrolizumab with or without Maintenance Olaparib in the First-line Treatment of Metastatic Squamous Non-small Cell Lung Cancer (NSCLC) [MK7339-008]

A Phase 3 Study of Pembrolizumab in Combination with Pemetrexed/Platinum (Carboplatin or Cisplatin) Followed by Pembrolizumab and Maintenance Olaparib vs Maintenance Pemetrexed in the First-Line Treatment of Participants with Metastatic Non squamous Non-Small-Cell Lung Cancer [MK7339-006]

Hematology

Statins for Venous Event Reduction in Patients with Venous Thromboembolism [The SAVER Trial]

Early Detection of Lymphoma Relapse Using Plasma ctDNA Sequencing.

For inquiries: Franca Cantini, Program Manager, Oncology Clinical Trials franca.cantini.comtl@ssss.gouv.qc.ca



Community Engagement



Community Conference: May 8, 2024

Wellness and Behavioural Interventions

On May 8, 2024, St. Mary's Research Centre hosted our first externally-held Community Conference. Focusing on the overarching theme of Wellness and Behavioural Interventions, SMRC spotlighted two lecturers: Dr. Louise Potvin (Professor in the Department of Social and



Preventative Medicine, l'Université de Montreal) and Dr. Anita Koushik (Professor in the Gerald Bronfman Department of Oncology, McGill University).



Dr. Louise Potvin explored the effects of food donation programs on vulnerable communities across four regions of Quebec in her presentation on "Que deviennent les personnes qui utilisent le don alimentaire pour la première fois?" Food aid helps to reduce the immediate threat of hunger, and improved income enables the gradual abandonment of food aid. This study ultimately saw 58% of the people surveyed positively impacted by using the food donation program, to the point where after two years, they no longer relied on it.

Dr. Anita Koushik addressed the social determinants of health (such as tobacco and physical activity) to improve health outcomes in her lecture on "Nutrition et cancer: fruits et legumes". Consumption of fruits and vegetables, as well as other healthy behaviours, can actively help decrease a person's risk of cancer. This presentation gave a thorough overview of the statistical data of fruit & vegetable consumption worldwide, and discussed studies showing the links between diet and cancer. The studies found that consumption of fruits and vegetables decreased the risk for most types of cancer.



The event was held at the Bibliothèque de Côte-des-Neiges and attracted numerous members of the CDN-NDG community, including Multicaf, Corporation de Développement Communautaire de Côte-des-Neiges and Université de Montréal. SMRC's goal for this conference was to facilitate knowledge transfer between research institutions and the wider community, as well as create stronger community ties within the Côte-des-Neiges neighbourhoods. Creating this bridge allows for the knowledge we acquire through the research we do to actively and tangibly benefit community members in a more immediate manner.

Stay tuned for details of SMRC's next Community Conference, which will be taking place in the fall.

St. Mary's Research Centre Scientific Series





Scientific Series Recap: Thursday, May 2, 2024

What can be said about the links between precarious migratory status and health status? Discussion of a cross-sectional study of migrants without medical insurance, Montreal.

Dr. Patrick Cloos



Migrant communities in Montreal often do not have a comprehensive understanding of the Canadian healthcare landscape. To support them, providing a framework for accessing medical insurance and other healthcare services is integral. On May 2, 2024, SMRC welcomed Dr. Patrick Cloos (Professor at the School of Social Work and the Department of Social and Preventive Medicine, Université de Montréal) to present his research on the links between migratory status and health status.

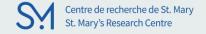
Key takeaways from the presentation included:

- An understanding of the causal factors that lead to a precarious migratory status, including that the majority of migrants in this situation came to Canada with a status and lost it (e.g., work or travel visa).
- For 80.6% of migrants surveyed, one of the primary reasons many forgo adequate medical care is insufficient funds; Doctors of the World (Canada) provides medical care to migrants without medical assurance and limited finances.
- There are prominent psychosocial determinants associated with a negative education, income, social network, racism, mental distress, unmet health needs, fears and anxieties.

Dr. Patrick Cloos is a professor at the School of Social Work and the Department of Social and Preventive Medicine, Université de Montréal. His courses focus on health and the environment. Before joining the academic field, Dr. Cloos practiced emergency medicine in hospital and humanitarian settings for Médecins sans frontières in several regions of the world, notably in wartime. He was also Director of Public Health in Dominica (West Indies). His doctoral thesis was completed as part of an interdisciplinary program in the social sciences, and focused on public health and racism. Dr. Cloos is currently involved in several global health studies. In particular, he is conducting research into the links between climate change, migration and health in the Caribbean.

*This presentation can be credited for clinical staff (continuing medical education)

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Form: https://forms.office.com/r/G55ZuLS11Q



St. Mary's Research Centre Scientific Series





Scientific Series Recap: Thursday, May 22, 2024

The RecoverEsupport Program: digital intervention to implement ERAS behaviors and support patients prepare for and recover from their cancer surgery.

Dr. Rebecca Wyse



International 'Enhanced Recovery from Surgery' (ERAS) guidelines include patient-led behaviours to reduce post-surgical complications and reduce length of stay in hospital. Examples of targeted behaviours include mobilisation, rapid resumption of feeding and fluids and pain management. Patients often need support in following these guidelines, and healthcare professionals can benefit from tools to help track patients' behaviours. On May 22, SMRC welcomed international guest speaker Dr. Rebecca Wyse (Associate Professor in the School of Medicine and Public Health at the University of Newcastle, Australia) to discuss how the digital RecoverEsupport Program assists patients in recovery from surgery.

Participants at this presentation gained a better understanding of the Enhanced Recovery After Surgery (ERAS) Guidelines and learned more about how Dr. Wyse and her team used evidence-based behavioural change techniques to build a digital tool to support patients and healthcare providers in the application of the guidelines. The tool is being investigated through a comprehensive research program exploring the feasibility, acceptability and effectiveness of the RecoverEsupport digital health intervention. Attendants reflected on how similar programs could be rapidly scaled up and/or adapted for other surgical patient groups.

Rebecca Wyse is a behavioural researcher who specialises in developing and evaluating digital behavioural interventions to support the prevention and treatment of chronic diseases. She is currently a research fellow with the Cancer Institute NSW and she also holds an honorary fellowship with the Heart Foundation of Australia. Her current research focuses on helping cancer patients better prepare for and recover from their surgery and their radiation therapy. She has previously conducted prevention research across a range of risk factors for cancer, cardiovascular disease, asthma and obesity, and has conducted effectiveness and implementation trials across a range of settings.

*This presentation can be credited for clinical staff (continuing medical education)

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Upcoming Events



Thursday, June 6, 2024

Scientific Series: Dr. Diego Herrera



SMRC Scientific Series presentations are self-approved group learning activities (Section 1) as defined by the Maintenance of Certification Program of the Royal College of Physicians and Surgeons of Canada and recognized by the College of Family Physicians of Canada.

Upcoming Events



Thursday, June 20, 2024

Scientific Series: Dr. Harmehr Sekhon



SMRC Scientific Series presentations are self-approved group learning activities (Section 1) as defined by the Maintenance of Certification Program of the Royal College of Physicians and Surgeons of Canada and recognized by the College of Family Physicians of Canada.

From the DAAI (formerly DAUER)

Centre intégré universitaire de santé et de services sociaux de l'Ouest-del'Île-de-Montréal









The DAUER becomes the DAAL

The Academic Affairs, Teaching and Research Directorate (DAUER) is changing its name to the Academic Affairs and Innovation Directorate (DAAI) with Ms. Fatima Azzahra Lahrizi at its head. There have been no changes to the composition and mandate of the Directorate's service units.

Research Ethics Board (REB) Updates

The REB has updated the consent form templates to include the ability to obtain consent from participants to anonymize their data for reuse for research purposes beyond the usual 7-year data retention period. This will give researchers more flexibility to retain their data for the long term. The REB will also publish a document providing guidelines for the multiple uses of research data. This document will be available on Nagano in the coming weeks.

Next project submission deadlines:

- Mental Health and Neuroscience subcommittee: July 22
- Biomedical subcommittee: June 19

Privacy Impact Assessment (PIA or EFVP)

Since the introduction of Law 25, research projects requiring access to personal information without consent must be subject to a Privacy Impact Assessment (PIA or EFVP in French). If this is your case, a person from the USER will contact you to guide you through this process.

Form F1H-Research Project Amendment Request Form-Harmonized has been **Amended**

Four options have been added under the 'impacts on feasibility' section. The responses will clarify whether the project requires another feasibility (known in French as a convenance) review. If a new feasibility approval is required, a letter of authorization with the requested changes may be sent to the research team upon request.

For inquiries, please contact: recherche.comtl@ssss.gouv.qc.ca











